

Geometry
Lesson 11: The Pythagorean Theorem
Math for Standards

Name _____
Date _____

EQ: How do you use the Pythagorean Theorem to find missing sides of a right triangle?

The Pythagorean Theorem compares lengths of the sides of a _____.

A right triangle will have one _____.

There are three sides to a right triangle. The two shorter sides are called _____ and the long side is the _____.

The formula for the Pythagorean Theorem is _____, where c always represents the _____.

We can rewrite the formula to solve for one of the _____.

We can use this to test if a triangle is a right triangle by _____ the side lengths.

Example 1: The given lengths represent two sides of a right triangle. Find the missing side if all side lengths are whole numbers.

a. 21 m, 72 m

b. 20 in, 52 in

c. 21 cm, 28 cm

d. 48 m, 50 m

Example 2: Find the length of the diagonal of a rectangle whose width is 9 in and length is 16 in.

Example 3: The side lengths of a triangle are given. Determine whether each is a right triangle.

a. 13, 12, 5

b. 13, 85, 80

c. 145, 17, 132

d. 364, 27, 365